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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/785,483

02/25/2004

Yutaka Kai

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1779

21171 7590 06/27/2008

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EXAMINER

PASCAL, LESLIE C

ART UNIT

PAPER NUMBER

2613

MAIL DATE

DELIVERY MODE

06/27/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/785,483	<b>Applicant(s)</b> KAI ET AL.	
	<b>Examiner</b> Leslie Pascal	<b>Art Unit</b> 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 5-12, 18-22, 25, 26 and 30-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 13-17 23-24 27-29 33-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2613

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 17, 23-24, 27-29 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iida et al (6597480) in view of Majima et al (5552919).

In the prior art, Iida et al teach a tunable filter (101) which is controlled by a control signal (output of 06), a detection unit (102), a control signal generating unit (103-106) which generates a control signal based on a detected result obtained by scanning (see element 106) and that the control signal is known for each signal light by the detected result (see element 04). In regard to "the range", they teach scanning which appears that it would be obvious to consider this to be across a range of wavelengths. In regard to claim 2, he uses the detected data and data in memory. In regard to the portion of the claim which says "transmitting and extracting", Majima et al teach that in the prior art figure 1, the signal is extracted only in order to control the filter. Majima et al then teaches transmitting and extracting the signal is well known in order to control the signal and pass it on to other devices. It would have been obvious to transmit and extract the signal in order to control the filter and transmit the optical signal on for further processing at a receiver. In regard to claim 17, in that Iida et al teach determining what the power relation for each wavelength is in order to be stored, it would appear obvious that he must determine what is the maximum power for each wavelength as claimed in claim 17.

In regard to the claims which are drawn to using two points and interpolating in order to determine the control signal, see the last sentence of the abstract. He uses two points to determine the optimum signal. Although lila et al do not teach specifics about using the adjacent wavelengths, lila et al teach that it is well known in the prior art to use the adjacent wavelengths to determine the optimal signal (column 1, line 54-column 2, line 4). It would have been obvious to use the adjacent wavelengths as taught by lila et al is well known in the priori art in order to provide optimal signal in the system of lila et al.). In regard to claim 14, when the system is modified, it would be obvious to reset the designation information. It would appear that wrong extraction would be avoided. In that in that he teaches calculating by determining between two points, it would have been obvious to use interpolation.

3. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over lida et al (6597480) in view of Majima et al (5552919). And further in view of Salomaa (2002/0030868).

Salomaa teaches a filter (32) that receives a WDM signal and is controlled by a control signal (FILTER TUNING signal); detection means (33) a control signal generator (35), which uses situation data (from 36) and the detected signal in order to provide the control signal. In regard to claim 3, see figure 5 in which he show two frequencies at the edge of the band. This appears to be similar to the applicants', which teach that each wavelength can be checked or in the alternative the ends of the band can be determined. In regard to claim 13, he teaches storing the information (paragraph 33). In regard to claim 14, when the system is modified, it would be obvious to reset the

designation information. See paragraph 38. Salomaa teaches that the filter characteristics may change. It would therefore, have been obvious to reset the stored values. In regard to claims 15-16, if no signal is detected, it is obvious, if not inherent that the signal level would be below a specific threshold (which would be a reference). In regard to claim 17, in that Salomaa teaches determining what the power relation for each wavelength is in order to be stored, it would appear obvious that he must determine what is the maximum power for each wavelength as claimed in claim 17. Although it is not clear what is meant by "shifting a wavelength characteristic of the optical tunable filter... of the multiplexed signal". Salomaa's system operates similar to the applicant's system, so it appears that it obviously works in such a way

4. Applicant's arguments filed 4-1-08 have been fully considered but they are not persuasive. It is unclear why the amendment to the claims does not read on the art of record. It appears that the control signal generating unit generates the control signal by using the control signal applied to the optical tunable filter when the detection unit detects the signal light in scanning of the wavelength transmission characteristics. The control signal generating means clearly generates a control signal by using the control signal applied to the filter. it detects signal light, and as shown in the figure uses scanning (element 106). Although the applicant argues that the prior art of record does not teach the amended portion of the claims, it is unclear which portion the applicant feels the prior art does not read on. The applicant recites the amended portion of the claim without explaining how the art does not read on the claim. It is not clear to the

examiner which portion is not taught by the reference, so it is unclear from the record why the applicant feels that the case is allowable.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leslie Pascal/  
Primary Examiner  
Art Unit 2613